

# BUSINESS PROCESS IMPROVEMENT MODEL FOR THE SEVENTH-DAY ADVENTISTS TERTIARY INSTITUTIONS IN SOUTHERN ASIA PACIFIC REGION

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## **Abstract**

In the world of academe, business Process Improvement (BPI) is seen as one of the leading methodologies to deliver higher educational institutions with high quality products and services. The main objective of BPI is to improve business processes, and hence its approach is to address business and production processes, not people, as the means of improvement.

This research surveyed the existing operating and administrative system and procedures of the tertiary institutions of the Seventh-day Adventists in Asia Pacific Region and on this basis, proposed a BPI model that could be adopted by said schools.

The study yielded following results: (1) The Seventh day Adventist tertiary institutions in the Southern Asia Pacific Region are ready for BPI. However, certain dimensions of the existing culture may impede readiness for BPI. These include a bureaucratic structure that requires everyone to stick to formal structures and procedures and low risk tolerance where there is pressure to make the right decisions. (2) The existing operating and administrative system and procedures of the Seventh-day Adventists Tertiary Institutions in Southern Asia Pacific Division may serve the present needs of the institutions but need to be redesigned to achieve world-class performance. This is the purpose of the proposed BPI change initiative using the model proposed by the researcher. (3) The Seventh-day Adventists Tertiary Institutions in Southern Asia Pacific Division are beset with serious problems relating to processes concerning human resource management, inventory control and school plant management.

The proposed BPI model provides a guide to the tertiary institutions for a change initiative. It contains both analytical and “normative” elements. Its analytical features dissect and clarify problems; the normative part synthesizes solutions, utilizing design principles applied to findings from analyzing existing operating and administrative systems and procedures of the institutions. The normative and analytical components are thus linked, and together constitute an integrated management change model.

**Keywords:** business process improvement, administrative process improvement, school management improvement, school productivity improvement, TQM in the academe.

## **Introduction**

Business Process Improvement (BPI) has been considered one of the underlying change dynamic tools of some widely practiced and researched, and at a certain stage revolutionary, management movements. Some representative examples that have recently attracted worldwide attention are the total quality management movement, seen as one of the propellers of the intensely publicized in the 1980s “economic Japanese revolution”, and the

business process reengineering movement, with a number of radical improvements in quality, productivity and competitiveness reported as having accrued from its application to large US organizations in 1990s (Hammer and Chamoy, 1993).

The main goal of BPI is to improve business processes, as the term itself implies. Its approach is to address business and production processes, not people, as the means of improvement and is built on quality management principles. It helps an organization make significant advances in the way its business processes operate. And this is done through defining an organization's strategic goals and objectives and processes to better meet customer requirements (Hammer and Stanton, 1995).

BPI is usually seen as being carried out by temporary work groups with a beginning and end permanent teams, or mixed groups with permanent and non-permanent staff. It is generally viewed as being directed towards benefiting the organization which the target business process or processes belong to. The types of improvement sought by BPI efforts typically focus on business process, quality, and productivity (Harrington, 1991).

In the world of academe, BPI is seen to be one of the leading methodologies to deliver higher educational institutions with high quality products and services. School organizations are seeking not simply to automate existing operations, but to improve and redesign business processes and capture customers' expectations for products and service delivery. Involving documentation, measurement, and analysis for the purpose of improving the functioning of a process, BPI's goals are to increase customer satisfaction, achieve higher quality, reduce waste, reduce cost, increase productivity, and speed up the process.

Some of the best higher educational institutions have used the principles of BPI to save hundreds of dollars a year, to achieve unprecedented levels of customer satisfaction, and to speed up and make more flexible all aspects of their operations.

It is on these premises that the researcher proposed to undertake a study of the existing operating and administrative systems and procedures of the tertiary institutions of the Seventh-day Adventist in Asia Pacific Region to which he belongs and the problems they have encountered relative thereto. In so doing, he evolved a Business Process Improvement model that could be adopted by said schools.

The research study made use of the research and development model. The database survey, on the other hand, made use of the descriptive-normative survey research design to assess the operational and administrative performance of the Seventh-day Adventist tertiary institutions (HEIs) in said region. A total of nine (9) colleges and universities in the Southern Asia Pacific Division of the SDA church participated in the survey.

## **Result of Database Survey**

### ***1. The readiness of the Seventh-day Adventists tertiary institutions in the Southern Asia Pacific Region for BPI***

The "work hard, play hard" and "bet your company" cultures are pervasive in the tertiary institutions. This means most faculty members and employees are action-oriented and are oriented towards roles, structures, rules, procedures, job descriptions, etc. These types of culture also require big stakes decisions with considerable time passing before the results are known. Pressures to make the right decisions are thus always present in this cultural environment. This may foster a risk-averse environment that may impede a change initiative like a BPI project especially if it does not clearly show positive results for the institutions.

Specifically, the culture of the Seventh-day Adventist tertiary institutions along these seven dimensions can be described as follows:

*Individual autonomy:* Self-reliance and freedom are prevalent values in the tertiary institutions as evidenced by the weighted means obtained.

*Structure:* Formality seems to be much observed. Likewise, authority and status are also highly valued. The school organizations may be described as bureaucratic as there is an observed tendency for the faculty and administrative personnel to stick to formal structures and procedures.

*Support:* Caring is valued in the tertiary institutions which imply a high degree of assistance and warmth provided by the school management to the employees. Paternalism is a typical Asian cultural value. This paternalistic concern is often communicated through solicitous concern over the faculty and employees' welfare.

*Identification:* The faculty and employees have a strong sense of belonging or identity with the Seventh-day Adventist tertiary institutions as shown by the highest rank obtained (1.8830). Identity is a value that can work positively for the schools.

*Performance-reward:* Rewards seem to be focused on the individual's performance rather than on group's or team's performance. It is quite possible that the reason why team spirit is a value that needs to be strengthened stems from the fact that incentives and rewards are focused on individual rather than on group or team work.

*Conflict tolerance:* Openness is another value prevalent in the tertiary institutions. This indicates that teachers and school personnel are open about differences which are crucial in conflict resolution. Diversity is also accepted in the schools which also implies being open about differences.

*Risk tolerance:* Risk taking is a moderately prevalent value in the tertiary institutions. This notwithstanding, aggressiveness is also a prevalent value (2.4406).

The dimensions above may either foster or impede change initiatives such as BPI.

There had been a number of change initiatives in the respondent schools in the past. One such change initiative is the purchasing enhancement effort instituted by the Seventh-day Adventists in its member schools. Looking from hindsight, the project was not so successful. As can be seen, this and other past change initiatives were not so successful.

Most of these past change initiatives could have failed because of the desire to maintain a safe, secure and predictable status quo; the fear that it would break up the employees' workgroup because of the change initiative; and because it threatened their job security.

Except for the faculty and employees who are ambivalent/neutral to change, all groups are committed to BPI with the Board of Trustees as the most committed. That the administrative employees are ambivalent/undecided could be explained by the fact that they have yet to understand fully how BPI works and how it will affect their work.

## ***2. Existing operating and administrative systems and procedures***

### **Academic Planning**

Existing processes in academic planning of the nine Seventh-day Adventist Tertiary Institutions in Southern Asia Pacific Division are the same. A proposal for academic planning has to proceed through various deliberative bodies in a university before it reaches the Board of Trustees, where it is subjected to final approval. At various levels, inputs from students, non-academic and professional faculty are also sought, thus ensuring that a university's academic plans are available for comment, and susceptible to change in the light of the comments made.

## Human Resource Management

The recruitment of individuals for faculty and staff appointment is a process that involves the president, the academic dean, and the members of the department concerned. When a vacancy occurs, any of the above may suggest candidates for consideration. Names of prospective staff members may be obtained from the department of education of the division, union/conference office or from sister colleges. The former maintains a file of individuals who are doing graduate study in various colleges and universities and who are interested in college teaching. After all prospective candidates for appointment have been identified, recommendations concerning the general suitability and qualifications of each person are obtained. Contacts are then made by the department head. When the most promising candidate is agreed upon, the individual is either invited to the campus or is interviewed by HRD department. The individual is then nominated to academic committee for consideration and to finance committee for fund availability. Further discussion will be done in president's council committee before it is forwarded to the university board if trustees for final approval.

Relative to training and development, the University Human Resources Development Department does the following: (a) establish, administer and coordinate training policies and programs to meet University training requirement; (b) develop programs which support the University's vision, mission and goals and the continued growth and education of the faculty and staff; (c) review and approve training programs open to the University community; (d) monitor training programs and provide consulting training assistance to departments as resource allow, particularly in regard to In-service Training Programs; and (e) maintain University training records and files. The Human Resources Development Department will then forward the training and development proposal to Academic committee which immediately after discussion will forward the President's Council Committee for final approval.

Performance evaluations in Seventh-day Adventist Tertiary Institutions begin with developing a clear description of the work to be done for a specific position. This requires discussion of the performance standards and evaluation form with new employees at the beginning of their employment. Supervisors have performance discussions at the 30-day, 60-day, 90-day, and 120-day check points during the 180-day probationary period. Though not required by University policy, this practice allows managers and employees to have a mutual understanding about how things are going. If a manager decides to terminate a probationary employee, notes from these discussions provide useful documentation.

The immediate supervisor who assigns and observes work should do the performance evaluation. However, in many cases, it is also appropriate for the supervisor to option additional performance feedback from other employees or students. They also obtain information though peer evaluations and both internal and external customer feedback on an employee's work. In some cases, head department ask employees to assess their supervisor as boss. It is also considered a good motivational strategy to ask employees to monitor and assess their own performance prior to an evaluation. This often increases their involvement, empowering them to improve productivity.

Faculty and personal movements include: (a) promotion; and (b) demotion. The Promotion and Tenure Committee screens nominations and recommends those qualified for promotion and to serve as an advisory group to the departmental chair in the preparation of the departmental report. This is then reviewed by the dean and finally be the provost and vice

president for academic affairs. This is then forwarded to the president for transmittal to the Board of Trustee for final approval.

In cases of demotion or reassignment, the department official (Vice President, Dean Chairman or Director) consults with the Director of Human Resource Department or his/ her designee concerning the demotion of a staff member to reassign him/her to position where he/she will be able to meet performance requirements, to apply disciplinary action for misconduct, or for other reasons.

### **Purchasing**

The nine Seventh-day Adventists Universities in the SSD region are operating paper-based purchase order system for their purchase order system for their procurement of goods and services. The critical components of the purchase order system include the following steps: purchase requisitions, review and fund availability certification, encumbrance of funds, purchase order, receipt of goods and services, setting up of Accounts Payable and payment.

### **Inventory Control**

The Dean, Department Head, Departmental Inventory Coordinator or other designated officials are responsible for the custody, proper use, reasonable care, and maintenance of all property purchased, assigned to, or under the control of their respective debarments or locations of the Universities. All universities' equipment must be inventoried annually by the inventory control personnel.

### **School plant maintenance**

Plant maintenance is the normally funded, ongoing program for the upkeep of buildings, equipment, roads, grounds, and utilities required to keep a Facility in a good condition. The Universities apply unplanned maintenance system only to budget restrictions. Each department is responsible for the maintenance of department equipment and building. Any repair needed to be done by maintenance department must be requested by head department by filling up the form provided and submit it to maintenance department after an approval by finance department.

### ***The problems encountered by the tertiary institutions***

#### **Academic planning**

One of the serious problems cited is the non-extensive participation of faculty and staff of the University in the planning process. Another serious problem was that planners do not consider fulfilling the educational needs of students.

#### **Human resource management**

Some of the surveyed colleges and universities do not have a full time human resource manager. Likewise, personnel policies were found to be inadequate. Another problem considered serious is the observation of the respondents that personnel policies are not reviewed regularly. It is also observed that there is no continues training and development programs in-place.

### **Purchasing**

Vendors/suppliers' evaluation is not done regularly by higher management.

### **Inventory control**

The colleges and universities surveyed do not have a full time inventory or supplies custodian in charge of material storage and issuance. Perpetual inventory records are not maintained. There is no unit control for all high value items. Physical counts are not taken at regular intervals.

### **School Plant Maintenance**

School equipment is not well-maintained and protected against the elements. No physical inventory of school plant assets are taken at regular intervals. There is no long-term plan for school plant acquisition, requisition, renovation, or replacement of those which are retired or fully depreciated. Finally, there are no individual equipment ledger cards for each school fixed asset.

### ***Test of significant differences in terms of the readiness of the tertiary institutions***

ANOVA tests showed that all the four calculated significant values are than alpha 0.05 signifying that there are statistical significance differences between tertiary institutions of the Seventh-day Adventists universities in Southern Asia Pacific Division on readiness to BPI change.

### ***Test of significant differences in the problems encountered by the tertiary institutions***

Based on the ANOVA tests, all the five calculated sigma values are lesser than alpha 0.05. Thus, it is concluded that there are significant differences in the problems encountered by the tertiary institutions in each of the areas mentioned above.

### **Elements of the Proposed BPI Model**

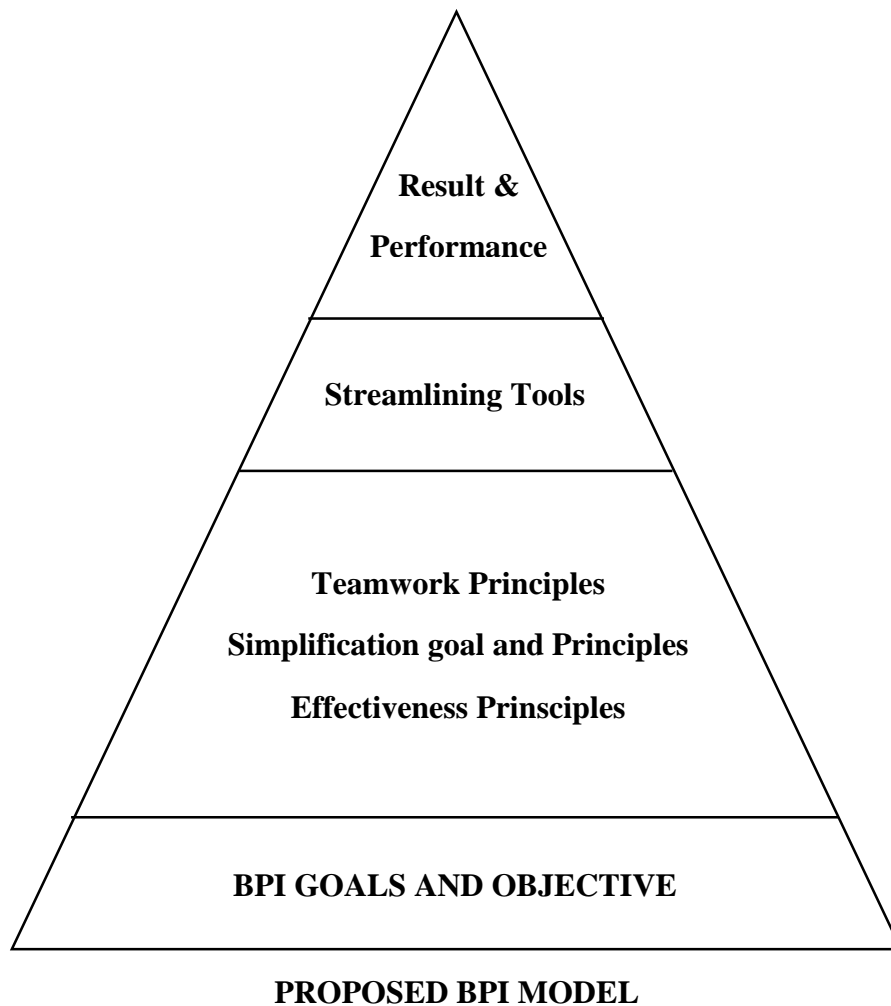
Given the foregoing results of the database survey, the researcher proceeded to construct a BPI model that can be used in the said tertiary institutions.

The objective of the model is to provide a framework by which the current administrative processes in the Seventh-day Adventists tertiary institutions in the Asia Pacific Region can be simplified with the end in view of improving productivity in said institutions of learning.

#### **A. BPI goals and objectives.**

These provide an organizational focus, setting the tone and vision for process improvement. Administrative and service goals must be in sync with the Institutions' strategic goals.

Organizational structures, strategic planning processes, and resource allocation decisions must support these institutional goals.



## **B. Foundation and Principles.**

These prepare the Institutions for sustained, rather than episodic process improvement. They cut across process, organization and technical boundaries, ensuring a common base of management's skills, quality design principles and technological readiness while focusing on pivotal dimensions of the administrative culture of the Institutions.

The principles are considered necessary to change the patterns of a bureaucracy, through altering the dynamic of values, expectations, rewards, disincentives, and belief systems that define and perpetuate the administrative culture of the institution.

1. Teamwork principles, increasingly needed as administrative organizations become more "matrixed," the organization become less hierarchical and more networked, and process improvement becomes increasingly cross-functional and necessary.
2. Simplification goals and principles, to create explicit counter-pressure against the inherent tendencies of a bureaucracy to continually add more systems, programs-variants, controls, specialized policies, and layers of complexity.
3. Effectiveness principles, an interrelated set of normative quality criteria -- centered around accountability and performance values -- that differs sharply from prior shared beliefs, conventional wisdom, and bureaucratic patterns.

### C. Streamlining tools.

These provide analysis, training and an influx of ideas for process improvement; establish productivity targets; and shape improvements through enhanced, systematic communication between school customers and administrative services providers.

Based on the database summary, the following goals are needed to stimulate cross-cutting, institution-wide savings in terms of transactional efficiency, team behavior, and process simplification: (1) reduce purchasing processing cycles; (2) reduce staff personnel programs; (3) eliminate paper track for all announcements that are currently provided electronically for some recipients and via paper for others; (4) reduce performance evaluation processes to one system for all staff employees; improve the process so that it fosters teamwork behavior, supervisor/employee dialog regarding priorities, innovation, and process improvement; and simplify performance evaluation tools and policies so as to facilitate full utilization; (5) revise staff incentive programs to provide team-based as well as individual awards and to accord priority recognition for process innovations and administrative streamlining improvements; (6) based on the maxim that “what gets measured gets done,” administrative units will develop the following plans and tools: (a) ongoing, up-to-date lists of completed process innovations and streamlining improvements; (b) action Plans indicating key responsibility assignments and target performance dates for planned process improvements; (c) plans for cross training, staff development, and position de-specialization as needed to support broader responsibilities of staff in generalist roles making decisions closer to the actual delivery of services; (d) plans for technology upgrading and interoperability to support staff using new information retrieval tools in a networked, client-server environment; (e) evidence that the cycle-time to deliver one or more important services has been markedly reduced. (This tool usually provides a good measure of process improvement, as it requires solving problems that materialize as delays, such as distances/times between operations that are too long for coordination, split functions that fragment responsibility for errors, or processes that are too lengthy or complicated to reconstruct cause and effects when problems surface.); (f) reduce the number of signatures required for administrative transaction or from. (However, some transactions receive more than half a dozen signatures when viewed across the entire transaction, front-to-end. The goal should be one or, at most, two approvals prior to authorizing an administrative transaction; post-audit notifications may be provided if appropriate for communications or control.); (g) every administrative unit will seek out and critically evaluate “best practices” from outside tertiary institutions through site visits to comparable units considered most advanced in process streamlining, external reviews by peer experts selected for their “best practices” (7) staff training courses supporting transactional processing (for various systems and programs) will be computer driven and screen based. Live instructors will be utilized only for higher-level skills/materials or when labor-intensive instruction is actually cost effective, new administrative system will be sufficiently simple, intuitive, and transparent. Newly developed systems will contain self-tutoring tools such as “help screens” and internal training modules, rather than relying on separate training programs; (8) the “Delegations Project,” which re-delegates authorizations and responsibilities from the highest to the lowest appropriate level in the organization, is recommended for full implementation.



#### ***D. Results and performance.***

It is expected that the proposed model will bring about the following result and performance:

##### **A. Business Process Innovation Team's' and major redesign elements**

##### **1. Human Resource Team**

Examine the hiring process of the University, including the applicant process. Special emphasis should be given to simplifying the process, identifying those parts where is no "value added." Increase speed of response to applicant and units, and reduce process costs while achieving high quality.

The major redesign elements are: (a) ongoing, proactive recruitment process that builds a continuous applicant data base; (b) additional unit responsibility for budget, promotions, interdepartmental transfers, compensation, and classification; (c) automated inventories of skills and knowledge with the concomitant databases of supplemental, interview, and reference-check questions; (d) on-line document preparation with required fields and built0in validation.

##### **2. School Plant and Maintenance**

Review the campus' remodeling and alterations process, and develop recommendations to improve Facilities Management services to institutions departments for small projects and minor capital projects. Special emphasis should be given to simplify the process, identifying those parts where there is no "value added" to the customer's product; to increase speed and flexibility of response; and to reduce process costs while achieving high quality.

The major redesign elements include the following: (a) partnership between customer and business manager to create a single point of contact for both the customer and Facilities Management; (b) costumers are given management and out-sourcing alternatives in all phases of the project (idea, development, implementation, and close-out). The project can be customized to include a variety of options for design, construction, installation, and project management; (c) customer services ethos integrated with the new process; (d) education to ensure customer knowledge of options and process limitations; and (e) electronic communication to keep customers updated on existing projects and to make widely available accurate, updated drawings and plans of buildings and infrastructure.

##### **3. Purchasing**

Review the campus purchasing process and develop recommendations/ "solutions" for process improvement.

The major redesign elements are: (a) utilization of procurement cards for low value purchasing; (b) direct delivery by courier; (c) expanded use of contracts; (d) increase debit card use; (e) employ electronic commerce features; (f) streamline time-intensive policies and procedures; (g) revise universities policies and procedures; and (h) establish Accounts Payable web site.

## B. Paper Reduction Summary

The underlying goals of this program component include; (a) review business processes for streamlining/quality improvement opportunities; (b) identify ways to simplify business processes; (c) create opportunities to delegate and clarify responsibilities; (d) reduce excessive approvals, complex prior-authorization procedures and lengthy, bureaucratic informational paths; (e) (as well as) reduce reliance on paper for business processes.

## C. Progress on Goals for Administrative Process Simplification

This includes the following: (1) eliminate paper track for all announcements that are currently provided electronically for all recipients and via paper for others; (2) implement one performance evaluation system for all teacher and staff employees; improve the process so that it fosters teamwork behavior, supervisor/employee dialog regarding priorities, innovation, and process improvement; and simplify performance evaluation tools and policies so as to facilitate full utilization; (3) revise staff incentive programs to provide team-based as well as individual awards and to accord priority recognition for process innovations and administrative streamlining improvements; (4) based on the management concept that “what gets measured gets done” administrative units will develop the following plans and tools:

- a. Ongoing, up-to-data lists of completed process innovations and streamlining improvements
  - b. Action plans indicating key responsibility assignments and target performance dates for planned process improvements.
  - c. Plans for cross-training, staff development, and position de-specialization as needed to support broader responsibilities of staff in generalist roles. This could be done by cross-training plans
  - d. Plans for technology upgrading and interoperability to support staff using new information retrieval tools in a networked, client-server environment.
5. No administrative transaction or form will require more than two prior approvals. All forms generated within department must comply with a maximum of two prior approvals (except as mandated by policies).
  6. The re-delegation of authorizations and responsibilities from the upper to the lowest appropriate level in the institutions will be fully completed. Re-delegation will be established based on re-delegation principles.

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